

Q&A: Topical questions *for our* community

How are you helping maths teachers to improve their classroom practice?

Teaching and Learning Coaches now operate in hundreds of schools across Victoria.

These three coaches from the Southern Metropolitan Region – none of whom are maths specialists themselves – have been working with maths teachers to help them improve their classroom practice. And the results have been remarkable.

Charmayne Lane

Teaching and Learning Coach
Dandenong/Springvale Network



Long ago when I was a girl at school, I learned to fear maths. As someone who could hold her own in other areas of the curriculum, I accepted that I just didn't have a 'maths brain'. There were strings of algorithms I knew off by heart, just as I knew poems, irregular French verbs and the periodic table. But for the most part, maths was a source of anxiety and made me feel stupid.

So perhaps it was madness to take on the role of maths coach, especially at secondary level. Years of curriculum coordination had taught me that secret maths business was a highly protected area and I was easily discouraged from questioning teaching strategy in a subject where I had so little confidence.

The wonderful thing about learning though, is that mistakes and failure can be as valuable as successes. Turn a problem around and it becomes an opportunity. Multiply two negatives and you have a positive. My own

negative experiences in mathematics classrooms could be turned to my advantage. I knew I was not alone in the fog. Plenty of students lose the plot in maths and, like me, give it a miss as soon as they have the choice.

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I knew it wouldn't be a walk in the park. I knew I had a lot to learn. What I didn't know was that my feeble maths background would actually turn out to be an advantage. If I'd been coaching in one of the four areas I was qualified to teach to Year 12, I may have taken a different approach and missed a lot. As it turned out, I became a full-time learner.

Certainly there was the odd sceptical look from secondary maths coordinators but to their credit, most teachers accepted that my knowledge of teaching and learning allowed me to be useful as an observer and a coach.

It is such a pleasure to work with another teacher in the spirit of inquiry. It is my job to ask the questions which help us realise that direct instruction and the text book are two of many strategies we can use to illuminate the minds of our students. The wealth of other resources now available to teachers is something I can also bring to their attention, as the need arises.

Learning is the goal. Teaching is part of the equation but only part. Sometimes, having stimulated their interest, we need to get out of our students' way. If their minds are engaged, they will learn independently. At other times they will learn and explore together. Why should teachers be any different?

As a teaching and learning coach at Lyndhurst SC, Hampton Park SC and Cranbourne SC I work with a team of dedicated teachers who generously give their time to solve problems, improve learning and make the maths curriculum more vibrant. Our time together includes brief corridor conversations, casual planning conversations in the staffroom, more structured reflecting and problem solving conversations, and formal planning or reflecting conferences, built around a lesson or event.

At first I felt a foreigner; an English teacher treading upon my maths colleagues' territory. It has been a long time since I had taught mathematics and that was only to Year 7.

My concerns proved unnecessary as I have been welcomed in their Year 7 and 8 classrooms and they never fail to generously give up their time for planning and discussion. Working together has widened both our

viewpoints which enable us to explore new ideas along with existing beliefs and values. We have found a lot of strategies and ideas that are transferable across discipline areas.

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As coach and teacher we work together to build a trust that allows us to work in a cooperative relationship which enables us to experiment with a variety of teaching and learning strategies to improve student outcomes in mathematics. Feedback is requested by the teacher and is data driven, value free and relevant which allows the teacher, in the words of one of my colleague's, opportunities to reflect on how things are going and plan for improvement.

Some areas that coaches have chosen to focus on to improve student learning and engagement have been fostering self-directed learning strategies, teaching using inquiry learning methods, developing rich assessments tasks and planning effective maths lessons.

The gathering and analysing of data to strategically inform planning for teaching and learning has been integral to improving student outcomes. Coaches have conducted On Demand Testing and Scaffolding Numeracy in the Middle Years Assessment which can be used in conjunction with topic tests, AIM/NAPLAN results and VELS reports to help teachers make consistent, on-balance judgments about student achievement. Comparing data within schools has allowed us to better understand student achievement and monitor student progress. We have found that as we learn and improve practices, students benefit and learning increases.

Doreen Wheeler

Teaching and Learning Coach
Cranbourne Network



Marie Littlehales

Teaching and Learning Coach
Dandenong/Springvale Network



It is a privilege to be in classes with teachers who are open to new ideas and I would find this job impossible if not for the enthusiasm of the teachers I work with. I have been teaching maths for many years and I hope that this experience will be useful to the teachers I am coaching.

As well as this experience, since being in this role I have also had the chance to do lots of professional development regarding new maths resources available so I can share with teachers. We are all learning together and I do not try to disguise the fact!

I have also feel very supported in the four schools I work in. Everyone involved has been very welcoming and generous with the time they have spent with me sharing their knowledge and

enthusiasm for their schools. The administrations of the schools have been supportive of the program and have provided time and support for teachers involved in coaching.

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Part of the coaching program has involved the collection of data to more accurately assess student achievement. This has been a good focus for conversations with classroom teachers. The data collection has also meant that VCAA On-Demand testing is now in use in all of my four schools, which

is helping to identify student misconceptions in mathematics, which may in turn help guide curriculum planning.

Coaching is new to me and all coaches have been involved in lots of professional development and we have been given many resources to use in our coaching role. We are also members of teams and the support and sharing in these teams is a great support to me too.

For more information on the work of Teaching and Learning Coaches, email Team Leader David Burton on burton.david.dj@edumail.vic.gov.au

REMEMBRANCE DAY 2008 POSTER COMPETITION

2008 THEME: War to End All Wars - Hopes for Lasting Peace All Primary Schools in the State of Victoria are invited to take part in this poster competition as part of the 90th Armistice Anniversary commemoration on Remembrance Day 11 November 2008.

PRIZES INCLUDE: Winning poster will become official 2008 Remembrance Day poster for Shrine of Remembrance, DVD and books pack from DVA Personalised visit to the Shrine of Remembrance and participation in the field of Poppies activity during November 2008. Entries close Friday 19 September

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